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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,013	10/03/2000	Bruce Edward Ziegler	30602	4538
7590 02/18/2005				
SPRINT 6391 SPRINT PARKWAY OVERLAND PARK, KS 66251-6100				
EXAMINER KADING, JOSHUA A				
ART UNIT 2661		PAPER NUMBER		

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/678,013

Applicant(s)

ZIEGLER ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-14, and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
10

Claims 1-4, 6, 11-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leong et al. (U.S. Patent 6,269,398 B1) in view of Mousseau et al. (U.S. Patent 6,687,251 B1).

15

In regard to claim 1, Leong discloses "an administrator to select a... local routing switch (figure 3A, step 302 where identifying is the same as selecting); listing data tables from the... local routing switch (figure 13, where all the entries are different routing table or routing interface entries); the administrator to select one of the data
20 tables (figure 13 where the square around the first entry means the administrator has selected that data table); retrieving information from the selected data table and for displaying the information (figure 14, where the information displayed is the data table chosen in the previous step); permitting the administrator to make changes to the retrieved information (figure 14, element 1405 permits the administrator to change the
25 table); and sending changes made to the retrieved information to an interface on the... local routing switch so that the changes may be incorporated in the data table

(figure 14, element 1406 allows the changes to be sent or applied to the selected router)."

However, Leong lacks "a computer program" to perform the method and "a voice-over-i.p." routing switch.

5 Mousseau discloses the use of "a voice-over-i.p. routing switch" (col. 2, lines 35-37). It also would have been obvious to one with ordinary skill in the art at the time of invention to include the VoIP routing switch with the method for the purpose of connecting the VoIP capabilities to existing telephone networks. The motivation for using the existing network in conjunction with VoIP components allows the system to
10 use resources effectively by supplementing old technology (the existing telephone networks) with new technology (VoIP).

 It would have been obvious to one with ordinary skill in the art at the time of invention to include the computer program with the method for the purpose of allowing the administrator to obtain and change information about the network that only a
15 computer program can obtain and change. The motivation being that a computer program is the most efficient way of performing the method.

 In regard to claim 11, Leong discloses "a system for modifying data tables contained in a...local routing switch, the system comprising:

20 a server computer (col. 6, lines 44-48 and col. 7, lines 6-10 where it is saying that one of these units can function as a network manager or server); and
 a user computer (col. 6, lines 44-48);

...an administrator to select a...local routing switch from a list thereof displayed on the user computer (figure 3A, step 302 where identifying is the same as selecting); listing data tables from the...local routing switch (figure 13, where all the entries are different routing table or routing interface entries); the administrator to select one of the
5 data tables from a list thereof displayed on the user computer (figure 13 where the square around the first entry means the administrator has selected that data table); retrieving information from the selected data table and for displaying the information on the user computer (figure 14, where the information displayed is the data table chosen in the previous step); permitting the administrator to make changes to the retrieved
10 information (figure 14, element 1405 permits the administrator to change the table); sending changes made to the retrieved information to an interface on the...local routing switch so that the changes may be incorporated in the data table (figure 14, element 1406 allows the changes to be sent or applied to the selected router).”

However, Leong lacks “a computer program” to perform the method and “a voice-
15 over-i.p.” routing switch.

Mousseau discloses the use of “a voice-over-i.p. routing switch” (col. 2, lines 35-37). It also would have been obvious to one with ordinary skill in the art at the time of invention to include the VoIP routing switch with the method for the purpose of connecting the VoIP capabilities to existing telephone networks. The motivation for
20 using the existing network in conjunction with VoIP components allows the system to use resources effectively by supplementing old technology (the existing telephone networks) with new technology (VoIP).

It would have been obvious to one with ordinary skill in the art at the time of invention to include the computer program with the method for the purpose of allowing the administrator to obtain and change information about the network that only a computer program can obtain and change. The motivation being that a computer
5 program is the most efficient way of performing the method.

In regard to claims 2 and 12, Leong and Mousseau discloses the computer program of claim 1 and the system of claim 11. However, Mousseau lacks what Leong further discloses, "...the retrieved information is presented in a plurality of logical tables
10 (figure 14 where the information is in a table and element 1405 allows for changes to the table)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the logical tables for the same reasons and motivation as in claims 1 and 11.

15 In regard to claims 3 and 13, Leong and Mousseau disclose the computer program of claim 2 and the system of claim 12. However, Mousseau lacks what Leong further discloses, "wherein the administrator may make changes directly to one of the plurality of logical tables (figure 14 where the information is in a table and element 1405 allows for changes to the table)." It would have been obvious to one with ordinary skill in
20 the art at the time of invention to include the computer program with the changing of the logical tables for the same reasons and motivation as in claims 2 and 12.

In regard to claims 4 and 14, Leong and Mousseau disclose the computer program of claim 2 and the system of claim 11. However, Mousseau lacks what Leong further discloses, "...the administrator may save a logical table from the logical tables to a file and perform changes to the file (figure 14, where the save button allows the administrator to save the table to a file)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the saving of the logical table for the same reasons and motivation as in claims 2 and 11.

In regard to claims 6 and 16, Leong and Mousseau disclose the computer program of claim 1 and the system of claim 11. However, Mousseau lacks what Leong further discloses, "...the administrator to search for information in the data table (figure 14 where the table is set up so that the administrator can simply look at the organized columns and data to search for the information desired)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the searching of the logical tables for the same reasons and motivation as in claims 1 and 11.

Claims 7-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leong et al. in view of Mathur (U.S. Patent 6,308,220 B1) in view of Mousseau et al.

In regard to claim 7, Leong discloses "a method for modifying data tables contained in a...local routing switch, the method comprising the steps of: selecting

a...local routing switch from a list thereof displayed on a computer (figure 3A, step 302 where identifying is the same as selecting and as can be seen in figures 4-20 all selecting and modifying of data is done by computer display); selecting a data table supported by the selected...local routing switch from a list thereof presented on the
5 computer (figure 13 where the square around the first entry means the administrator has selected that data table); modifying the information (figure 14, element 1405 permits the administrator to change the table); and sending the modifications to an interface on the...local routing switch using the computer so that the modifications may be
10 incorporated in the data table (figure 14, element 1406 allows the changes to be sent or applied to the selected router)."

However, Leong lacks what Mathur discloses, "searching for information in the selected data table by entering search criteria in the computer (col. 2, lines 43-46 where it is implied that the MAC or IP address being searched for was entered into the search engine at some point, further although it does not explicitly state who or what is entering
15 the search criteria in the computer, it is merely a matter of design choice what would do this; that is to say whether a received piece of data or a string entered by a user is the search criteria is irrelevant because the search engine will operate the same and return the same results in both instances, therefore it is a matter of design choice which (if not both) would be used)."

20 It would have been obvious to one with ordinary skill in the art at the time of invention to include the search engine and search for the purpose of configuring the router (or switch) to continue routing data (Mathur, col. 1, lines 36-40). The motivation

for searching a routing table to find a corresponding output is so that the received data can then be transmitted to the next step in its transmission.

Leong and Mathur however, further lack what Mousseau discloses, "a voice-over-i.p. routing switch" (col. 2, lines 35-37). It also would have been obvious to one with ordinary skill in the art at the time of invention to include the VoIP routing switch with the method for the purpose of connecting the VoIP capabilities to existing telephone networks. The motivation for using the existing network in conjunction with VoIP components allows the system to use resources effectively by supplementing old technology (the existing telephone networks) with new technology (VoIP).

In regard to claim 8, Leong, Mathur, and Mousseau disclose the method as set forth in claim 7. However, Mathur and Mousseau lack what Leong further discloses, "the information is presented in a plurality of logical tables that may be modified by the administrator (figure 14 where the information is in a table)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the plurality of logical tables for the same reasons and motivation as in claim 7.

In regard to claim 9, Leong, Mathur, and Mousseau disclose the method as set forth in claim 8. However, Mathur and Mousseau lack what Leong further discloses, "the administrator may make changes directly to one of the plurality of logical tables (figure 14 where the information is in a table and element 1405 allows for changes to the table)." It would have been obvious to one with ordinary skill in the art at the time of

invention to include the modifying of logical tables for the same reasons and motivation as in claim 8.

In regard to claim 10, Leong, Mathur, and Mousseau disclose the method as set forth in claim 7. However, Mathur and Mousseau lack what Leong further discloses, "an administrator may save a logical table to a file and perform changes to the file (figure 14, where the save button allows the administrator to save the table to a file)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the saving of logical tables for the same reasons and motivation as in claim 7.

In regard to claim 17, Leong discloses, "a computer program stored on a computer-readable medium for directing a computer to act as an interface for a telecommunications switch, the computer program comprising the steps of: a code segment operable to instruct a browser to open an applet (col. 8, lines 18-22 where the opening of the "pop-up menu" is functionally equivalent to instructing a browser to open an applet because both are run on a subset program used for a specific purpose); a code segment operable to permit the applet to retrieve a list of telecommunications switches; a code segment operable to permit the applet to display the list of telecommunications switches on a display; a code segment operable to permit a user to select a switch from the list of telecommunications switches (figure 3A, element 302 and col. 8, lines 13-31); a code segment operable to display a list of data tables that may be accessed from the selected switch; a code segment operable to access information

contained in at least one data table listed in the selected switch (figure 13 where the square around the first entry means the administrator has selected that data table and col. 8, lines 32-44); a code segment operable to permit the user to modify the information in the data table (figure 14, element 1405 permits the administrator to
5 change the table); and a code segment operable to upload the modified data table to the switch (figure 14, element 1406 allows the changes to be sent or applied to the selected router).”

However, Leong lacks what Mathur discloses, to “permit the user to enter search criteria into the computer for searching the data table for desired information; search the
10 data table for the desired information based on the entered search criteria; retrieve the desired information containing the entered search criteria for viewing by the user (col. 2, lines 43-46 where it is implied that the MAC or IP address being searched for was entered into the search engine at some point, further although it does not explicitly state who or what is entering the search criteria in the computer, it is merely a matter of
15 design choice what would do this; that is to say whether a received piece of data or a string entered by a user is the search criteria is irrelevant because the search engine will operate the same and return the same results in both instances, therefore it is a matter of design choice which (if not both) would be used)...”

It would have been obvious to one with ordinary skill in the art at the time of
20 invention to include the search engine and search for the purpose of configuring the router (or switch) to continue routing data (Mathur, col. 1, lines 36-40). The motivation

for searching a routing table to find a corresponding output is so that the received data can then be transmitted to the next step in its transmission.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over
5 Leong et al. in view of Mathur as applied to claim 17 above, and further in view of U.S. Patent 5,963,939 (McCann et al.)

Regarding claim 18, Leong and Mathur disclose the computer program of claim
17. However, Leong and Mathur lack what McCann discloses, "a code segment for
10 sorting the retrieved information (col. 19, lines 18-24 where McCann shows that it is well known in the art to sort information in a database according to some predetermined search criteria)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the sorting of information for the purpose of organizing the
information according to some criteria. The motivation for organizing data is so that the
15 data can be ranked according to various characteristics of each piece of data, thereby allowing anyone to identify the "best" and "worst" data piece and use it accordingly (McCann, col. 19, lines 22-24).

Regarding claim 19, Leong, Mathur, and McCann disclose the computer program
20 of claim 17. However, Mathur and McCann lack what Leong further discloses, "the modification of the information includes supplementing the information (col. 12, lines 26-34 where button 1405 is used to update or supplement the information for each table)."

It would have been obvious to one of ordinary skill in the art at the time of invention to supplement the information for the same reasons and motivation as in claim 17.

Regarding claim 20, Leong, Mathur, and McCann disclose the computer program
5 of claim 17. However, Mathur and McCann lack what Leong further discloses, "wherein the modification of the information includes deleting the information (col. 12, lines 26-34 where button 1405 is clearly used to delete information in a corresponding table)." It would have been obvious to one of ordinary skill in the art at the time of invention to delete the information for the same reasons and motivation as in claim 17.

10

Response to Arguments

Applicant's arguments, see REMARKS, page 10, paragraph 3, filed 29
September 2004, with respect to the rejections under 35 U.S.C. 112, second paragraph
have been fully considered and are persuasive. The 35 U.S.C. 112, second paragraph
15 rejections of claims 17-20 have been withdrawn.

Applicant's arguments, see REMARKS, page 12, paragraph 2, filed 29
September 2004, with respect to the rejections under 35 U.S.C. 101 have been fully
considered and are persuasive. The 35 U.S.C. 101 rejections of claims 17-20 have
20 been withdrawn.

Applicant's arguments filed 29 September 2004 have been fully considered but they are not persuasive.

Applicant argues that there is no *prima facie* case of obviousness because Leong uses routers instead of switches, as in the claims; and equating routers to switches (as
5 done in the rejections) is improper because routers and switches have substantially different functions, operate at different levels of the OSI reference model, and are implemented in different ways, i.e. software vs. hardware (REMARKS, page 16, lines 4-13). The examiner respectfully disagrees.

Although applicant is generally correct that routers and switches function at
10 different layers of the OSI reference model and perform varyingly different functions, it is strongly believed that routers and switches can (and have been) equate to one another.

First, the concept that routers are implemented in software and switches are implemented in hardware is incorrect. Routers can fully be implemented in hardware, and support for this comes from Leong in figure 2, elements 101 and 102. Here it is
15 clearly shown that there are physical (hardware) based routers in communication with the rest of the system. Therefore, routers do not need to be implemented only in software.

Second, and more importantly, the idea that routers and switches are not functionally equivalent because they do not perform substantially the same functions is
20 also incorrect. As one of ordinary skill in the art will recognize, the basic functions of a switch are fully incorporated into the functions of routers, and thus routers can be used as switches. This is supported in U.S. Patent 5,963,939 McCann et al., col. 57, lines 8-9

where here McCann discloses that a router is nothing more than "an intelligent switch."
Therefore, the use of routers in Leong fully reads on applicant's claimed switches
because the function of applicant's switches is fully incorporated in Leong's routers.

5

Conclusion

The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure. U.S. Patent 6,119,165 Li et al. discloses that routers can equate
to intelligent switches (col. 1, lines 29-32).

10

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Joshua Kading whose telephone number is (571) 272-
3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

15

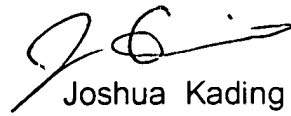
If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number
for the organization where this application or proceeding is assigned is 703-872-9306.

20

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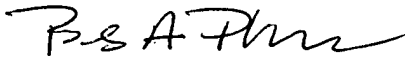
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Joshua Kading
Examiner
Art Unit 2661

February 8, 2005

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BOB PHUNKULH
PRIMARY EXAMINER